

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

2A9
Revision 13
THRUSH AIRCRAFT, INC. (Snow, Rockwell, Ayres) S2A
September 2, 2003

TYPE CERTIFICATE DATA SHEET NO. 2A9

This data sheet which is a part of Type Certificate No. 2A9 prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

Type Certificate Holder	Thrush Aircraft, Inc. 300 Old Pretoria Road P.O. Box 3149 Albany, Georgia 31706-3149
Type Certificate Holder Record	Snow Aeronautical Company transferred TC to North American Rockwell Corporation on February 18, 1970 North American Rockwell Corporation transferred TC to Rockwell International, Albany Aircraft Division on April 3, 1973 Rockwell International, Albany Aircraft Division transferred TC to Rockwell International, Commander Aircraft Division on July 27, 1973 Rockwell International, Commander Aircraft Division transferred TC to Ayres Corporation on November 28, 1977 Ayres Corporation transferred TC to Quality Aerospace on November 26, 2001 Quality Aerospace transferred TC to Thrush Aircraft on July 30, 2003

I. - Model S2A, 1 PCLM (Restricted Agricultural Category Only), Approved April 2, 1959

<u>Engine</u>	Continental W670-6A 465 lb. (-47) Continental W670-6N 470 lb. (-47) Gulf Coast W-670-240 (See NOTE 2(1)(e) 528 lb. (-47)
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<u>Fuel</u>	87 minimum grade aviation gasoline
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<u>Engine Limits</u>	W-670-6A/6N For all operations, 2075 rpm (220 hp.) W-670-240 For all operations, 2100 rpm
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<u>Carburetor and Carburetor Setting</u>	Bendix NA-R6D, 2-1/16 in. venturi Parts listing 392488A-10 for the W-670-6A/6N
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<u>Propeller and Propeller Limits</u>	(a) McCauley D-1093 Hub and SS-138-6 blades 82 lb. (-60) Static rpm at max. permissible throttle setting: Not over 2000 rpm, not under 1900 rpm No additional tolerance permitted. Diameter: 102 in. max., 100 in. min. When installed on Continental engine blades must be indexed in the zero position and the tachometer placarded to avoid continuous operation between 1500 and 1650 rpm.
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<u>Airspeed Limits</u>	V _m Maneuvering 100 mph (87 knots) CAS V _{ne} Never exceed 126 mph (109 knots) CAS
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<u>C. G. Range</u>	(+22.6) to (+28.2) at 2500 lb. (+27.0) to (+28.2) at 3460 lb. Straight line variation between points given.			
<u>Empty Weight C.G. Range</u>	None.			
<u>Datum</u>	Wing leading edge			
<u>Leveling Means</u>	Top of longeron at the cockpit			
<u>Maximum Weight</u>	3460 lbs.			
<u>Number of Seats</u>	1 (+10)			
<u>Maximum Hopper Capacity</u>	1000 lb. (+43)			
<u>Fuel Capacity</u>	44 gallons (+40.3) (One 22 gallon tank in each wing, tanks interconnected). Usable capacity: S/N 1005 thru 1015 - 30 gallons S/N 1016-1033, 1035, 1036, 1039, 1042, 1045, 1048, 1049, 1050A and up - 40 gallons See NOTE 1 for data on unusable fuel.			
<u>Oil capacity</u>	3.3 gallons (+28)			
<u>Control Surface Movements</u>	Elevator	Up 21°	Down 29°	
	Elevator tab	Up 18°	Down 24°	
	Rudder	Left 17°	Right 17°	
	Aileron	Up 22°	Down 18°	
<u>Serial Numbers Eligible</u>	1005 through 1033, 1035, 1036, 1039, 1042, 1045, 1048, 1049, 1050A and up.			
<u>Certification Basis</u>	CAR 8.10(a)(1) effective 11 October 1950, and CAM 8, Appendix B as amended 19 March 1957. Type Certificate No. 2A9 issued 2 April 1959. Date of Application for Type Certificate 28 October 1958.			
<u>Production Basis</u>	Production of Spare Parts approved under Production Certificate 5SO. Prior to original airworthiness certification of any aircraft manufactured under this TC, an FAA representative must perform a detailed inspection for workmanship, materials and conformity with the approved technical data, and a check of the flight characteristics.			
<u>Equipment</u>	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis and CAM 8, Appendix B.51) must be installed in the aircraft for certification. In addition, either item (a), (b), (c), or (d) listed below is required: Dust dispensing installation per: (a) Snow Dwg. 802 43 lb. (+52) (b) Snow Dwg. 808 56 lb. (+52) Spray dispensing installation per: (c) Snow Dwg. 804 82 lb. (+61) (d) Snow Dwg. 807 76 lb. (+61)			

NOTE 1. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification. The certificated empty weight and the corresponding center of gravity location must include unusable fuel of 84 lb. (+40.3) for S/N 1005 through 1015 and 24 lb. (+40.3) for S/N 1016 through 1033, 1035, 1036, 1039, 1042, 1045, 1048, 1049, 1050A and up.

NOTE 2.

(1) The following placards must be installed:

(a) In clear view of the pilot:

For airplanes S/N 1005 through 1015: "Fuel gauge calibrated at ¼ tank increments.
Usable tank capacity 15 gallons each tank.

For airplanes S/N 1016 through 1033, 1035, 1036, 1039, 1042, 1045, 1048, 1049,
1050A and up: "Fuel gauge calibrated at ¼ tank increments. Usable tank capacity 20
gallons each tank."

For all airplanes:

"This airplane must be operated in accordance with the following limitations:

Never exceed speed (Vne) 126 mph CAS

Maximum gross weight 3460 pounds.

No acrobatic maneuvers including spins authorized."

"Sulphur dusting is prohibited unless special fire prevention measures have been incorporated in the aircraft."

(b) On hopper:

"Maximum hopper capacity 1000 lbs."

(c) Near carburetor heat control knob:

"Pull for carburetor heat."

(d) Adjacent to fuel tank filler necks:

FUEL (*) U.S. GAL. MIN. OCTANE 87 FUEL TANKS ARE INTERCONNECTED
ALLOW SUFFICIENT TIME FOR FUEL LEVEL TO EQUALIZE BEFORE TOP-OFF
OF TANKS. NO AROMATIC FUEL.

*(See "Fuel Capacity" item)

(e) Adjacent to oil filler cap:

OIL TANK

(*) GAL. CAP.

*(See "Oil Capacity" item)

(f) When the W-670-240 engine is installed, the following placard must be installed in clear view of the pilot:

"Because of uncertificated power plant components, this airplane shall not be operated over congested areas and is not eligible for a waiver to conduct special purpose operations over densely populated areas, in congested airspace, or in the vicinity of busy airports where passenger transport operations are being conducted."

NOTE 3.

In addition to the operation limitations set forth in this data sheet, a list of operating limitations as issued by the FAA representative must contain the area operating limitations, economic operating limitations and passenger limitations as prescribed in CAR 8.

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